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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/516,753

08/18/2005

Abdelali Hannoufa

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EXAMINER

PAGE, BRENT T

ART UNIT

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1638

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/516,753	Applicant(s) HANNOUFA ET AL.	
	Examiner BRENT PAGE	Art Unit 1638	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-42 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

The election by Applicant of a nucleic acid encoding bnKCP1 with traverse is hereby acknowledged. In an effort to address questions by Applicant regarding claim groupings regarding the invention, a new restriction requirement is presented for clarity.

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claims 1-8, and 10-15, drawn to a first method of regulating a nucleic acid of interest comprising providing a eukaryote having a first nucleic acid sequence comprising an operator sequence and a second nucleic acid sequence comprising a DNA binding protein and a recruitment factor protein wherein the recruitment factor protein binds a histone acetyltransferase protein.

Group II, claims 1-4, 9, 11 and 13-15, drawn to a second method of regulating a nucleic acid of interest comprising providing a eukaryote having a first nucleic acid sequence comprising a ROS operator sequence and a second nucleic acid sequence comprising a DNA binding protein and a recruitment factor protein wherein the recruitment factor protein binds a histone deacetylase protein.

Group III, claim 16, drawn to an isolated nucleic acid sequence encoding the sequence of bnKCP1.

Group IV, claim 17, drawn to an isolated nucleic acid sequence encoding amino acids 1 to 80 of SEQ ID NO:71.

Group V, claim 18, drawn to an isolated nucleic acid sequence encoding amino acids 1 to 160 of SEQ ID NO: 71.

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Group VI, claim 19, drawn to an isolated nucleic acid sequence encoding amino acids 81 to 215 of SEQ ID NO: 71.

Group VII, claim(s) 1-4, 11, 13-15, 20-21, 31, 33 and 34-42 drawn to a third method of regulating a nucleic acid of interest comprising providing a eukaryote having a first nucleic acid sequence comprising an operator sequence and a second nucleic acid sequence comprising a DNA binding protein and a recruitment factor protein wherein the recruitment factor protein is bnKCP1.

Group VIII, claim 22, drawn to an isolated nucleic acid encoding a bnKCP1 fusion protein, GAL4DB-bnKCP1.

Group IX, claim 23, drawn to an isolated nucleic acid encoding a bnKCP1 fusion protein, GAL4DB-HDAC.

Group X, claim 24, drawn to an isolated nucleic acid encoding the sequence of BnSCL1 (SEQ ID NO:81).

Group XI, claim 25, drawn to an isolated nucleic acid encoding amino acids 1 to 358 of SEQ ID NO:81.

Group XII, claim 26, drawn to an isolated nucleic acid encoding amino acids 1 to 261 of SEQ ID NO:81.

Group XIII, claim 27, drawn to an isolated nucleic acid encoding amino acids 1 to 217 of SEQ ID NO:81.

Group XIV, claim 28, drawn to an isolated nucleic acid encoding amino acids 146 to 358 of SEQ ID NO:81.

Group XV, claim(s) 1-4, 11, 13-15, 29-30, 32 and 34-42, drawn to a fourth method of regulating a nucleic acid of interest comprising providing a eukaryote having a first nucleic acid sequence comprising an operator sequence and a second nucleic acid sequence comprising a DNA binding protein and a recruitment factor protein wherein the recruitment factor protein is Bn-SCL1.

The only technical feature linking the claimed inventions are nucleic acids since there are claims directed to specific nucleic acid sequences that are not related to one another. This technical feature is not special because it does not constitute and advancement over the prior art. Verdin et al (PG PUBS US20030143712) for example

disclose nucleic acid sequences that encode a HDAC fusion protein (see paragraph 188 for example).

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Each method has sequence elements not required by the other and each isolated nucleic acid sequence is considered a separate invention. Applicant is required to elect a single invention or Group listed above.

Distinctly different DNA sequences are structurally distinct chemical compounds and are deemed to normally constitute independent and distinct inventions within the meaning of 35 U.S.C. 121. Absent evidence to the contrary, each such nucleotide sequence is presumed to represent an independent and distinct invention, subject to a restriction requirement pursuant to 35 U.S.C. 121 and 37 CFR 1.141 et seq.

Applicant is required to elect a Group above representing a single nucleotide sequence. Electing a sequence is not to be construed as a requirement for an election of species, since each nucleotide sequence is not a member of a single genus of invention, but constitutes an independent and patentably distinct invention.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim

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remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brent Page whose telephone number is (571)-272-5914. The examiner can normally be reached on Monday-Friday 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anne Marie Grunberg can be reached on (571)-272-0975. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Brent T Page

/Phuong T. Bui/

Primary Examiner, Art Unit 1638